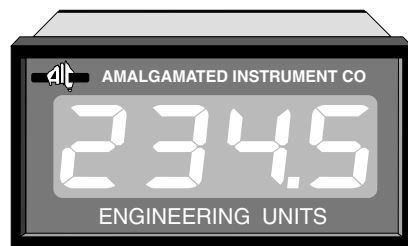


# The Intelligent PM6-IV fully user configurable panel meter



your  
choice of  
printed units  
on the  
front panel



## Features

- Measures DC inputs within the user selectable ranges of  $\pm 20\text{mA}$ ,  $4\text{-}20\text{mA}$ ,  $\pm 100\text{mV}$ ,  $\pm 1\text{V}$ ,  $\pm 10\text{V}$  or  $\pm 100\text{V}$
- 4 digit high brightness LED display
- Large 20mm high digits
- Display viewing distance up to 10m
- Programmable display brightness, helps to reduce glare in low light environments
- Easily scaled to read in engineering units e.g. Litres/sec., kPa, etc.
- Can be scaled without the need for test equipment or special tools
- All function setup and scaling adjustments by rear pushbuttons
- Calibration and set up data stored in EEPROM
- Programmable decimal point
- Programmable digital filter, improves stability
- Up to 16 point X, Y lineariser table
- Square root extractor
- Leading zero blanking
- Inbuilt unregulated transmitter supply 25mA max., (18 to 24V nominal) on both AC supply models. Isolated DC supply models transmitter supply is approx. 15VDC regulated
- Choice of power supplies  
240 VAC, 110VAC, 32VAC, 24VAC  
isolated 12 to 48V DC or 40 to 60 VDC  
(factory configured)
- Plug-in screw electrical terminals for ease of installation
- Din size 48mm x 96mm bezel
- Microprocessor based design
- Computer tested and pre-calibrated
- High reliability surface mount electronics
- Rugged aluminium enclosure
- 2 year guarantee

## Description

The PM6 panel mount display features easy to use set up programming functions. Changes to the settings are made using three pushbuttons located at the rear of the instrument.

The PM6-IV accepts DC inputs of  $\pm 20\text{mA}$ ,  $4\text{-}20\text{mA}$ ,  $\pm 100\text{mV}$ ,  $\pm 1\text{V}$ ,  $\pm 10\text{V}$  and  $\pm 100\text{V}$  and may be scaled to read directly in your engineering units. The instrument may be scaled without the need for test equipment, simply by entering in the display values for the upper and lower limits of the selected range. The PM6 may also be calibrated 'on line' by entering in the actual process values at two points. For applications requiring non linear calibration sixteen point X, Y linearisation and a square root extractor functions are included.

The high accuracy design allows for calibration within the pre-defined ranges, for example a 0 to 100mV input may be displayed using the 0-1V range and will be scalable over the full 4 digit display range with a minimum resolution of 1 in 20,000.

The large high brightness 20mm red LED display provides excellent visibility, even in brightly lit areas. A special feature of the PM6 is the programmable display brightness, which allows the display intensity to be reduced to conserve power or to reduce glare in darker areas.

The PM6 is packaged in a rugged industrial  $\frac{1}{8}$  DIN panel mount enclosure, with a behind panel depth of only 115mm.

PM6IV-1.2-0

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# Specifications and Ordering Information

Specifications are subject to change without notice

## TECHNICAL SPECIFICATIONS

|                   |   |
|-------------------|---|
| Input:            | DC $\pm 20\text{mA}$ , 4-20mA<br>DC $\pm 100\text{mV}$ , $\pm 1\text{V}$ , $\pm 10\text{V}$<br>or $\pm 100\text{V}$ |
| Input impedance:  | 105 $\Omega$ nom. DC current range<br>1M $\Omega$ nom. DC voltage ranges  |
| Accuracy:         | 0.1% FS when calibrated   |
| ADC resolution:   | 1 in 20,000   |
| AD conversion:    | Dual slope ADC  |
| Sample rate:      | 4 per second  |
| Memory retention: | Non volatile EEPROM memory  |
| Microprocessor:   | MC68HC05 CMOS   |
| Ambient temp:     | -10 to 60°C   |
| Humidity:         | 5 to 95% non condensing   |
| Display type:     | 4 digit red 20mm digit height   |
| Power supply:     | 240V, 110V, 32V, 24V AC or<br>isolated 12 to 48V DC<br>(factory configured)   |
| Power usage:      | AC supply 2VA plus<br>transmitter current<br>DC supply 2W plus<br>transmitter current                               |

Transmitter supply: DC output 18 to 24VDC nom. (unregulated) (AC supply models). For isolated DC supply models output is approx. 15VDC regulated. **(25mA maximum)**

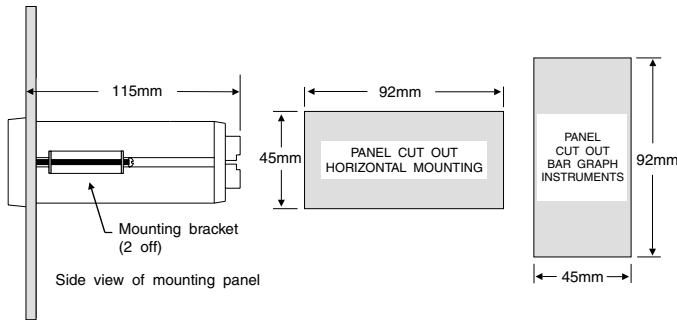
## PHYSICAL CHARACTERISTICS

|                |  |
|----------------|--|
| Bezel size:    | 48mm x 96mm x 10mm   |
| Case size:     | 44mm x 91mm x 120mm<br>behind face of panel                |
| Panel cut out: | 45mm x 92mm +1mm<br>& - 0mm                                |
| Connections:   | Plug in screw terminals<br>(up to 2.5mm <sup>2</sup> wire) |
| Weight:        | 400 gms unpacked   |

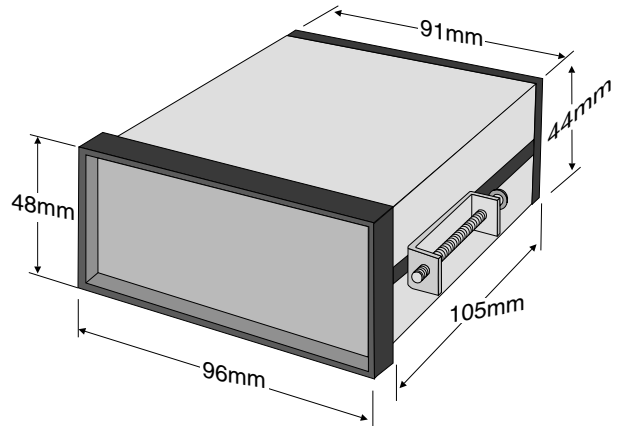
## ORDER CODE

|                    |               |
|--------------------|---------------|
| 240VAC powered:    | PM6-IV-240-4E |
| 110VAC powered:    | PM6-IV-110-4E |
| 32VAC powered:     | PM6-IV-32-4E  |
| 24VAC powered:     | PM6-IV-24-4E  |
| 12-48 VDC powered: | PM6-IV-DC-4E  |
| 40-60 VDC powered: | PM6-IV-48D-4E |

## PANEL MOUNT INSTALLATION



## INSTRUMENT DIMENSIONS



## ELECTRICAL CONNECTIONS

